## **CLAIMS**

## What we claimed is:

1. A compound of Formula (I):

$$\begin{array}{c|c} R_3 & R_2 \\ \hline R_5 & R_6 \\ \hline \end{array} (I) \qquad \cdot$$

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wherein:

 $R_1$  is H or  $C_{1-8}$  alkyl;

R<sub>2</sub> is C<sub>1-4</sub> alkyl, -CH<sub>2</sub>-O-C<sub>1-4</sub> alkyl, C<sub>1-4</sub> haloalkyl or CH<sub>2</sub>OH; and

 $R_3$ ,  $R_4$ ,  $R_5$  and  $R_6$  are each independently H,  $C_{1\text{--}4}$  alkyl, amino, cyano,

halogen, C<sub>1-4</sub> haloalkyl, nitro or OH; or

a pharmaceutically acceptable salt, hydrate and solvate thereof; provided that when  $R_2$  is  $C_{1-4}$  alkyl, -CH<sub>2</sub>-O- $C_{1-4}$  alkyl, and CH<sub>2</sub>OH then  $R_3$ 

and R<sub>6</sub> are not both hydrogen.

- 15 2. The compound according to claim 1 wherein  $R_1$  is H.
  - 3. The compound according to claim 1 wherein  $R_1$  is  $C_{1-8}$  alkyl.
  - 4. The compound according to claim 3 wherein  $R_1$  is methyl.

- 5. The compound according to claim 3 wherein  $R_1$  is ethyl.
- 6. The compound according to claim 3 wherein  $R_1$  is n-propyl.
- 25 7. The compound according to claim 3 wherein  $R_1$  is *iso*-propyl.
  - 8. The compound according to claim 3 wherein  $R_1$  is *n*-butyl.
  - 9. The compound according to any one of claims 1 to 8 wherein  $R_2$  is  $C_{1-4}$  alkyl.

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- 10. The compound according to any one of claims 1 to 8 wherein  $R_2$  is methyl.
- 11. The compound according to any one of claims 1 to 8 wherein R<sub>2</sub> is ethyl.
- 5 12. The compound according to any one of claims 1 to 8 wherein  $R_2$  is *iso*-propyl.
  - 13. The compound according to any one of claims 1 to 8 wherein  $R_2$  is n-butyl.
- 14. The compound according to any one of claims 1 to 8 wherein R<sub>2</sub> is C<sub>1.4</sub> haloalkyl.
- 15. The compound according to any one of claims 1 to 8 wherein  $R_2$  is -CF<sub>3</sub>.
  - 16. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is H.
- 15 17. The compound according to any one of claims 1 to 15 wherein  $R_3$  is  $C_{1-4}$  alkyl.
  - 18. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is -CH<sub>3</sub>.
- 19. The compound according to any one of claims 1 to 15 wherein  $R_3$  is amino.
  - 20. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is cyano.
  - 21. The compound according to any one of claims 1 to 15 wherein  $R_3$  is halogen.
- 25 22. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is a fluorine atom.
  - 23. The compound according to any one of claims 1 to 15 wherein  $R_3$  is a chlorine atom.
  - 24. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is a bromine atom.
    - 25. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is an iodine atom.
    - 26. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is C<sub>1-4</sub> haloalkyl.

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- 27. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is CF<sub>3</sub>.
  28. The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is nitro.

The compound according to any one of claims 1 to 15 wherein R<sub>3</sub> is -OH.

- 30. The compound according to any one of claims 1 to 29 wherein R₄ is H.
- 31. The compound according to any one of claims 1 to 29 wherein  $R_4$  is  $C_{1-4}$  alkyl.
  - 32. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is -CH<sub>3</sub>.
  - 33. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is amino.
- 15 34. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is cyano.
  - 35. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is halogen.
- 36. The compound according to any one of claims 1 to 29 wherein  $R_4$  is a fluorine atom.
  - 37. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is a chlorine atom.
  - 38. The compound according to any one of claims 1 to 29 wherein  $R_4$  is a bromine atom.
- 25 39. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is an iodine atom.
  - 40. The compound according to any one of claims 1 to 29 wherein  $R_4$  is  $C_{1-4}$  haloalkyl.
  - 41. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is CF<sub>3</sub>.
  - 42. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is nitro.
  - 43. The compound according to any one of claims 1 to 29 wherein R<sub>4</sub> is -OH.

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- 44. The compound according to any one of claims 1 to 43 wherein  $R_5$  is H.
- 45. The compound according to any one of claims 1 to 43 wherein  $R_5$  is  $C_{1-4}$  alkyl.
- 5 46. The compound according to any one of claims 1 to 43 wherein  $R_5$  is -CH<sub>3</sub>.
  - 47. The compound according to any one of claims 1 to 43 wherein  $R_5$  is amino.
- 48. The compound according to any one of claims 1 to 43 wherein  $R_5$  is cyano.
  - 49. The compound according to any one of claims 1 to 43 wherein  $R_5$  is halogen.
  - 50. The compound according to any one of claims 1 to 43 wherein  $R_5$  is a fluorine atom.
- 15 51. The compound according to any one of claims 1 to 43 wherein  $R_5$  is a chlorine atom.
  - 52. The compound according to any one of claims 1 to 43 wherein  $R_5$  is a bromine atom.
- 53. The compound according to any one of claims 1 to 43 wherein  $R_5$  is an iodine atom.
  - 54. The compound according to any one of claims 1 to 43 wherein  $R_5$  is  $C_{1.4}$  haloalkyl.
  - 55. The compound according to any one of claims 1 to 43 wherein  $R_5$  is  $CF_3$ .
- 25 56. The compound according to any one of claims 1 to 43 wherein  $R_5$  is nitro.
  - 57. The compound according to any one of claims 1 to 43 wherein  $R_5$  is -OH
  - 58. The compound according to any one of claims 1 to 57 wherein  $R_6$  is H.
  - 59. The compound according to any one of claims 1 to 57 wherein  $R_6$  is  $C_{1-4}$  alkyl.
  - 60. The compound according to any one of claims 1 to 57 wherein  $R_6$  is -CH<sub>3</sub>.

- 61. The compound according to any one of claims 1 to 57 wherein  $R_6$  is amino.
- 62. The compound according to any one of claims 1 to 57 wherein  $R_6$  is cyano.
- 5 63. The compound according to any one of claims 1 to 57 wherein  $R_6$  is halogen.
  - 64. The compound according to any one of claims 1 to 57 wherein  $R_6$  is a fluorine atom.
- 65. The compound according to any one of claims 1 to 57 wherein  $R_6$  is a chlorine atom.

- 66. The compound according to any one of claims 1 to 57 wherein  $R_6$  is a bromine atom.
- 67. The compound according to any one of claims 1 to 57 wherein  $R_6$  is an iodine atom.
- 15 68. The compound according to any one of claims 1 to 57 wherein  $R_6$  is  $C_{1-4}$  haloalkyl.
  - 69. The compound according to any one of claims 1 to 57 wherein  $R_6$  is  $CF_3$ .
  - 70. The compound according to any one of claims 1 to 57 wherein  $R_6$  is nitro.

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- 71. The compound according to any one of claims 1 to 57 wherein  $R_6$  is -OH.
- 72. The compound of claim 1 selected from the group consisting of:
  - 6,8-Dichloro-1-methyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine;

- 6-Chloro-1-methyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine;
- 8-Chloro-9-fluoro-1-methyl-2,3,4,5-tetrahydro-1H-3-benzazepine; and
- 8,9-Dichloro-1-methyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine.
- 73. The compound of claim 1 that is 9-bromo-8-chloro-1-methyl-2,3,4,5-tetrahydro-1H-3-benzazepine.
  - 74. The compound of claim 1 selected from the group consisting of:

    N-methyl-8,9-dichloro-1-methyl-2,3,4,5-tetrahydro-1H-3-benzazepine; and

    N-methyl-9-bromo-8-chloro-1-methyl-2,3,4,5-tetrahydro-1H-3-benzazepine.

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- 75. The compound according to any one of claims 1 to 74 wherein said compound is an R enantiomer.
- 5 76. The compound according to any one of claims 1 to 74 wherein said compound is an S enantiomer.
  - 77. A pharmaceutical composition comprising a compound according to any one of claims 1 to 76 and a pharmaceutically acceptable carrier.
- 78. A method of modulating a 5HT<sub>2C</sub> receptor comprising contacting said receptor with a therapeutically effective amount of a compound according to any one of claims 1 to 76.
  - 79. The method according to claim 78 wherein said compound is an agonist of said receptor.
  - 80. A method of prophylaxis or treatment of disorders of the central nervous system; damage to the central nervous system; cardiovascular disorders; gastrointestinal disorders; diabetes insipidus or sleep apnea comprising administering to an individual in need of such prophylaxis or treatment a therapeutically effective amount of a compound according to any one of claims 1 to 76 or a pharmaceutical composition according to claim 77.
- 81. The method according to claim 80 wherein the disorders of the central nervous system are selected the group consisting of depression, atypical depression, bipolar disorders, anxiety disorders, obsessive-compulsive disorders, social phobias or panic states, sleep disorders, sexual dysfunction, psychoses, schizophrenia, migraine and other conditions associated with cephalic pain or other pain, raised intracranial pressure, epilepsy, personality disorders, Alzheimer disease, age-related behavioral disorders, behavioral disorders associated with dementia, organic mental disorders, mental disorders in childhood, aggressivity, age-related memory disorders, chronic fatigue syndrome, drug and alcohol addiction, obesity, bulimia, anorexia nervosa and premenstrual tension.
  - 82. The method according to claim 81 wherein the disorder of the central nervous system is obesity.

- 83. The method according to claim 81 wherein the disorder of the central nervous system is Alzheimer disease.
- 84. The method according to claim 81 wherein the sexual dysfunction is Male erectile dysfunction.
  - 85. The method according to claim 80 wherein the damage to the central nervous system is by trauma, stroke, neurodegenerative diseases, toxic CNS diseases or infective CNS diseases.
- 10 86. The method according to claim 80 wherein the damage to the central nervous system is by encephalitis or meningitis.
  - 87. The method according to claim 80 wherein the cardiovascular disorder is thrombosis.
- 15 88. The method according to claim 80 wherein the gastrointestinal disorder is dysfunction of gastrointestinal motility.
  - 89. The method according to one of claims 80 to 88 wherein said individual is a mammal.
- 20 90. The method according to claim 89 wherein said mammal is a human.
  - 91. A method of decreasing food intake of an individual comprising administering to said individual a therapeutically effective amount of a compound according to any one of claims 1 to 76 or a pharmaceutical composition according to claim 77.
  - 92. The method according to one of claims 91 wherein said individual is a mammal.
    - 93. The method according to claim 92 wherein said mammal is a human.
- A method of inducing satiety in an individual comprising administering to said individual a therapeutically effective amount of a compound according to any one of claims 1 to 76 or a pharmaceutical composition according to claim 77.
  - 95. The method according to one of claims 94 wherein said individual is a mammal.

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- 96. The method according to claim 95 wherein said mammal is a human.
- 97. A method of controlling weight gain of an individual comprising administering to said

  5 individual suffering from weight control a therapeutically effective amount of a compound according to any one of claims 1 to 76 or a pharmaceutical composition according to claim 77.
  - 98. The method according to one of claims 97 wherein said individual is a mammal.
- 99. The method according to claim 98 wherein said mammal is a human.
  - 100. The method according to any one of claims 93, 96 and 99 wherein the human has a body mass index of about 18.5 to about 45.
  - The method according to any one of claims 93, 96 and 99 wherein the human has a body mass index of about 25 to about 45.
- The method according to any one of claims 93, 96 and 99 wherein the human has a body mass index of about 30 to about 45.
  - 103. The method according to any one of claims 93, 96 and 99 wherein the human has a body mass index of about 35 to about 45.
- 25 104. A method of producing a pharmaceutical composition comprising admixing at least one compound according to any one of claims 1 to 76 and a pharmaceutically acceptable carrier.
  - 105. A compound according to any one of claims 1 to 76 for use in a method of treatment of the human or animal body by therapy.
  - 106. A compound according to any one of claims 1 to 76 for use in a method of prophylaxis or treatment of disorders of the central nervous system; damage to the central nervous system; cardiovascular disorders; gastrointestinal disorders; diabetes insipidus or sleep apnea of the human or animal body by therapy.

- The use according to claim 106 wherein the disorders of the central nervous system are selected the group consisting of depression, atypical depression, bipolar disorders, anxiety disorders, obsessive-compulsive disorders, social phobias or panic states, sleep disorders, sexual dysfunction, psychoses, schizophrenia, migraine and other conditions associated with cephalic pain or other pain, raised intracranial pressure, epilepsy, personality disorders, Alzheimer disease, age-related behavioral disorders, behavioral disorders associated with dementia, organic mental disorders, mental disorders in childhood, aggressivity, age-related memory disorders, chronic fatigue syndrome, drug and alcohol addiction, obesity, bulimia, anorexia nervosa and premenstrual tension.
  - 108. The use according to claim 107 wherein the disorder of the central nervous system is obesity.
- 15 109. The method according to claim 107 wherein the disorder of the central nervous system is Alzheimer disease.
  - 110. The method according to claim 107 wherein the sexual dysfunction is Male erectile dysfunction.
  - 111. The use according to claim 106 wherein the damage to the central nervous system is by trauma, stroke, neurodegenerative diseases, toxic CNS diseases or infective CNS diseases.
- The use according to claim 106 wherein the damage to the central nervous system is by encephalitis or meningitis.
  - 113. The use according to claim 106 wherein the cardiovascular disorder is thrombosis.
- The use according to claim 106 wherein the gastrointestinal disorder is dysfunction of gastrointestinal motility.
  - 115. A use of a compound according to any one of claims 1 to 76 for the manufacture of a medicament for use in the treatment or prophylaxis of disorders of the central nervous system; damage to the central nervous system; cardiovascular disorders; gastrointestinal

disorders; diabetes insipidus or sleep apnea.

- The use according to claim 115 wherein the disorders of the central nervous system are selected the group consisting of depression, atypical depression, bipolar disorders, anxiety disorders, obsessive-compulsive disorders, social phobias or panic states, sleep disorders, sexual dysfunction, psychoses, schizophrenia, migraine and other conditions associated with cephalic pain or other pain, raised intracranial pressure, epilepsy, personality disorders, Alzheimer disease, age-related behavioral disorders, behavioral disorders associated with dementia, organic mental disorders, mental disorders in childhood, aggressivity, age-related memory disorders, chronic fatigue syndrome, drug and alcohol addiction, obesity, bulimia, anorexia nervosa and premenstrual tension.
  - 117. The use according to claim 116 wherein the disorder of the central nervous system is obesity.
  - 118. The method according to claim 116 wherein the disorder of the central nervous system is Alzheimer disease.
- The method according to claim 116 wherein the sexual dysfunction is Male erectile.

  dysfunction.
  - 120. The use according to claim 115 wherein the damage to the central nervous system is by trauma, stroke, neurodegenerative diseases, toxic CNS diseases or infective CNS diseases.
- 25 121. The use according to claim 115 wherein the damage to the central nervous system is by encephalitis or meningitis.
  - 122. The use according to claim 115 wherein the cardiovascular disorder is thrombosis.
- The use according to claim 115 wherein the gastrointestinal disorder is dysfunction of gastrointestinal motility.